What is claimed is:

1. An ac generator for a vehicle comprising:

a rotor having a shaft;

a stator having a multi-phase stator winding which has output lead wires for respective phase voltages;

a rectifier unit having input terminals respectively connected to said output lead wires; and

a frame having a wall supporting said stator at one side thereof and said rectifier unit at the other side, said wall having lead-wire-holes for at least two of said output lead wires to be respectively connected to said input terminals.

2. The ac generator as claimed in claim 1, further comprising a cooling fan fixed to one end of said rotor near said rectifier unit.

3. The ac generator as claimed in claim 1, further comprising a terminal member disposed in said lead-wire-holes for holding said output lead wires.

4. The ac generator as claimed in claim 1, wherein said multi-phase stator winding comprises a plurality of three-phase windings which are different in phase.

5. The ac generator as claimed in claim 4, wherein said

C2 Cont

rectifier unit comprises a plurality of three-phase full-wave rectifiers for said plurality of three-phase windings.

6. The ac generator as claimed in claim 5, wherein said rectifier unit comprises a common positive cooling fin and a common negative cooling fin.

Sub C3

7. The ac generator as claimed in claim 4, wherein said three-phase windings are disposed in said stator to generate three-phase voltages which are close in phase to each other,

said wall has three lead-wire-holes each of which has a bundle of said output lead wires respectively extending from said pair of three-phase windings, and

said output lead wires in said bundle are close to each other in phase.

8. The ac generator as claimed in claim 4 wherein said stator winding comprises a first star-connected three-phase winding and a second star-connected three-phase winding.

Sub C4

9. An ac generator for a vehicle comprising:

a multi-poled rotor;

a stator having a multi-phase stator winding which has output lead wires for multi-phase output voltages, respective two of said output lead wires forming a plurality of bundles;

a full-wave rectifier unit having input terminals disposed to correspond to said bundles and respectively connected to said output lead wires; and

a frame having a wall supporting said stator at one side thereof and said rectifier unit at the other side, said wall having lead-wire-holes disposed to correspond to said bundles.

10. The ac generator as claimed in claim 9, further comprising terminal members respectively disposed in said lead-wire-holes for insulating said bundles from each other.

11. The ac generator as claimed in claim 10, wherein said multi-phase stator winding comprises a plurality of three-phase windings which are different in phase.

12. The ac generator as claimed in claim 11, wherein said rectifier unit comprises a plurality of three-phase full-wave rectifiers for said pair of three-phase windings.

13. The ac generator as claimed in claim 12, wherein said rectifier unit comprises a common positive cooling fin and a common negative cooling fin.

14. The ac generator as claimed in claim 13, wherein said three-phase windings are disposed in said stator to generate three-phase voltages which are close in phase to

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each other; and

each of said bundles has a pair of said output lead wires which are close in phase to each other.

15. The ac generator as claimed in claim 14 wherein each of said three-phase windings comprises a star-connected phase-winding.

add A5 add B5 add C2